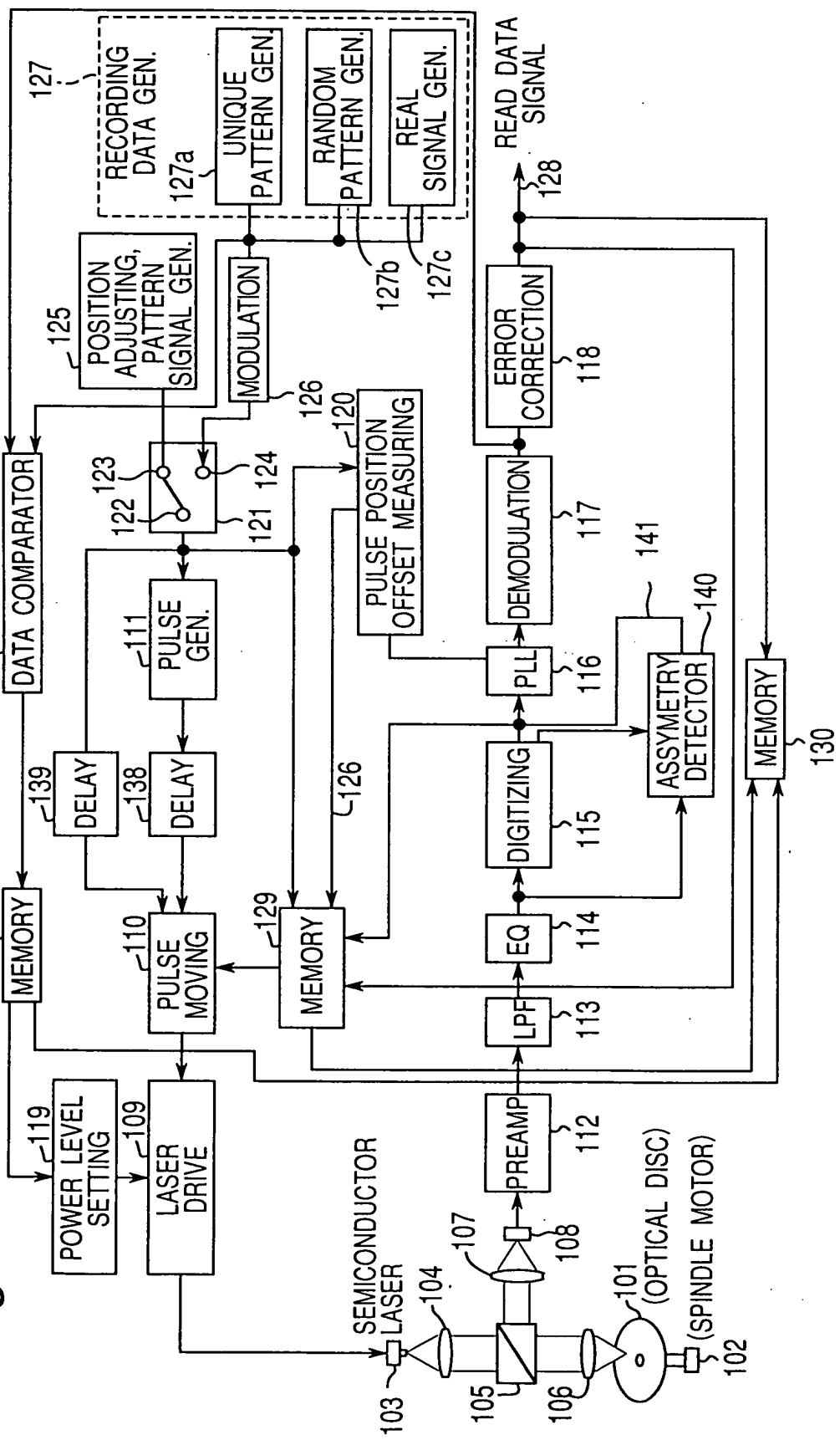


Fig. 1

Fig. 1



*Fig.2*

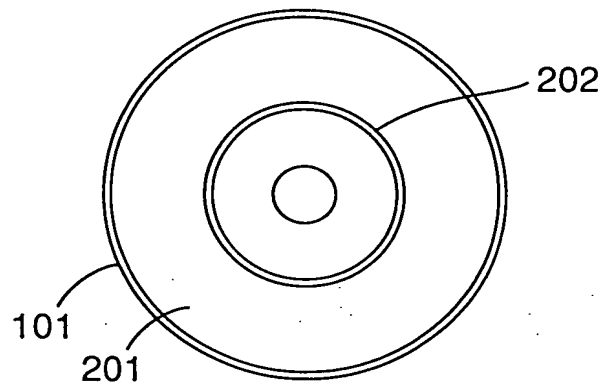
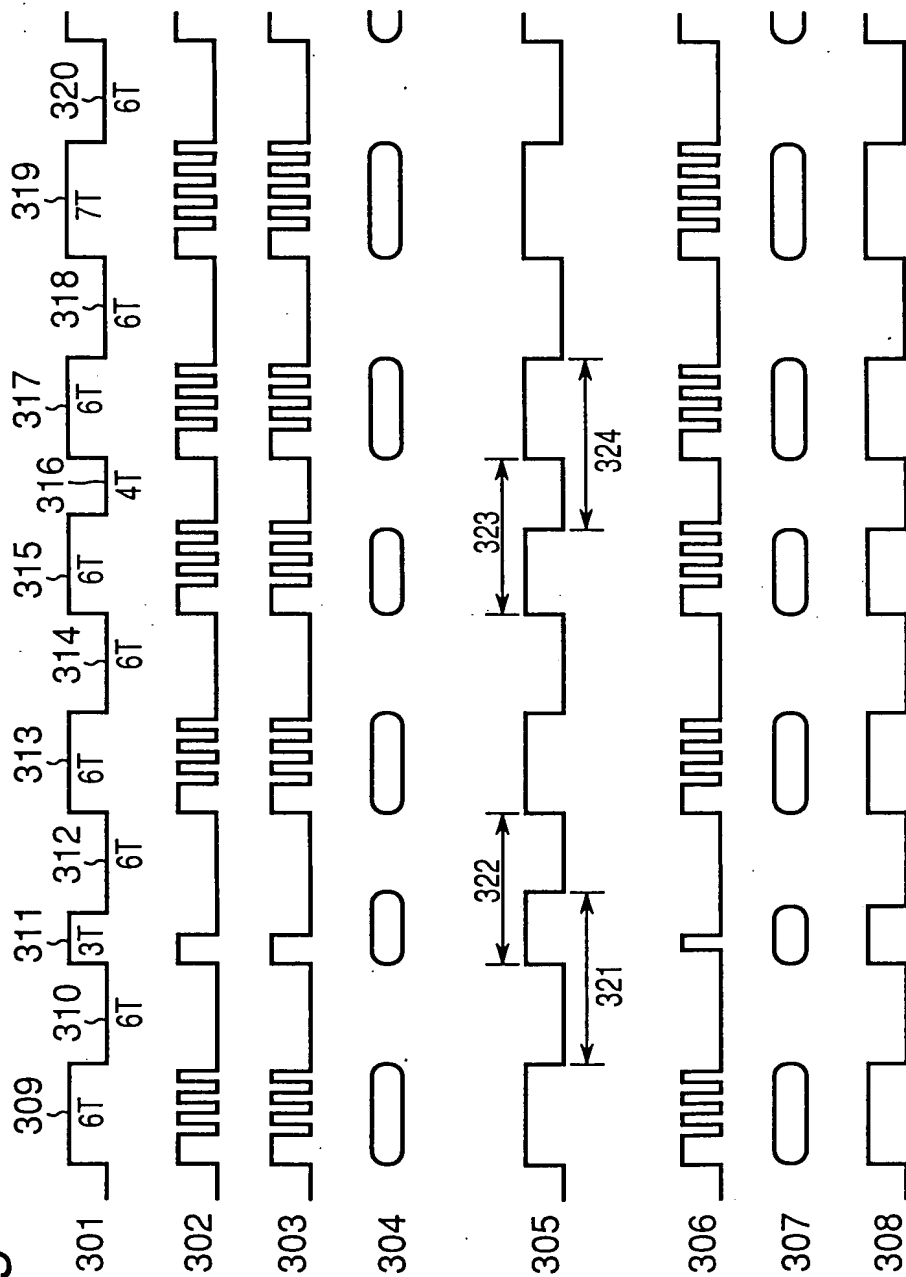
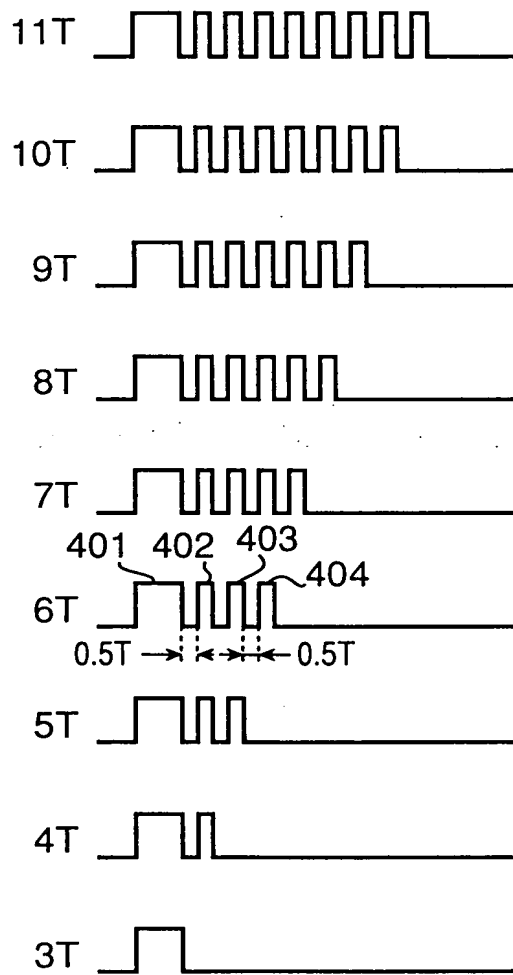


Fig. 3



*Fig.4*



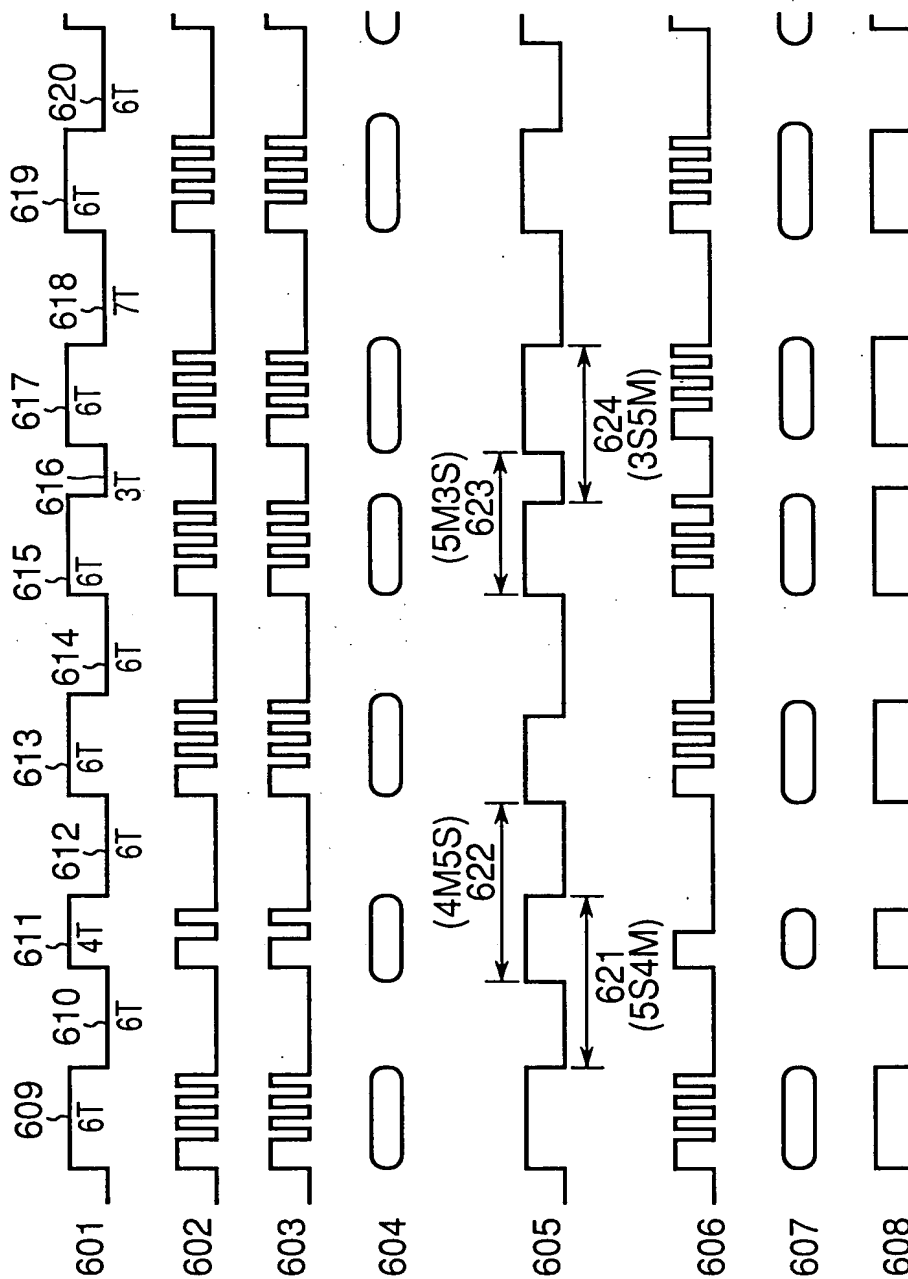
FIRST PULSE MOVEMENT (TF)	MARK SIGNAL			LAST PULSE MOVEMENT (TL)	MARK SIGNAL		
	$\geq 5T$	4T	3T		$\geq 5T$	4T	3T
PRECEDING SPACE SIGNAL	$\geq 5T$	5S4M	5S3M	$\geq 5T$	5M5S	4M5S	3M5S
	4T	4S4M	4S3M	4T	5M4S	4M4S	3M4S
	3T	3S4M	3S3M	3T	5M3S	4M3S	3M3S

Fig.5A

FIRST PULSE MOVEMENT (TF)	MARK SIGNAL			LAST PULSE MOVEMENT (TL)	MARK SIGNAL		
	$\geq 5T$	4T	3T		$\geq 5T$	4T	3T
PRECEDING SPACE SIGNAL	$\geq 5T$	5S4M0	5S3M0	$\geq 5T$	5M5S0	4M5S0	3M5S0
	4T	4S4M0	4S3M0	4T	5M4S0	4M4S0	3M4S0
	3T	3S4M0	3S3M0	3T	5M3S0	4M3S0	3M3S0

Fig.5B

**Fig. 6**



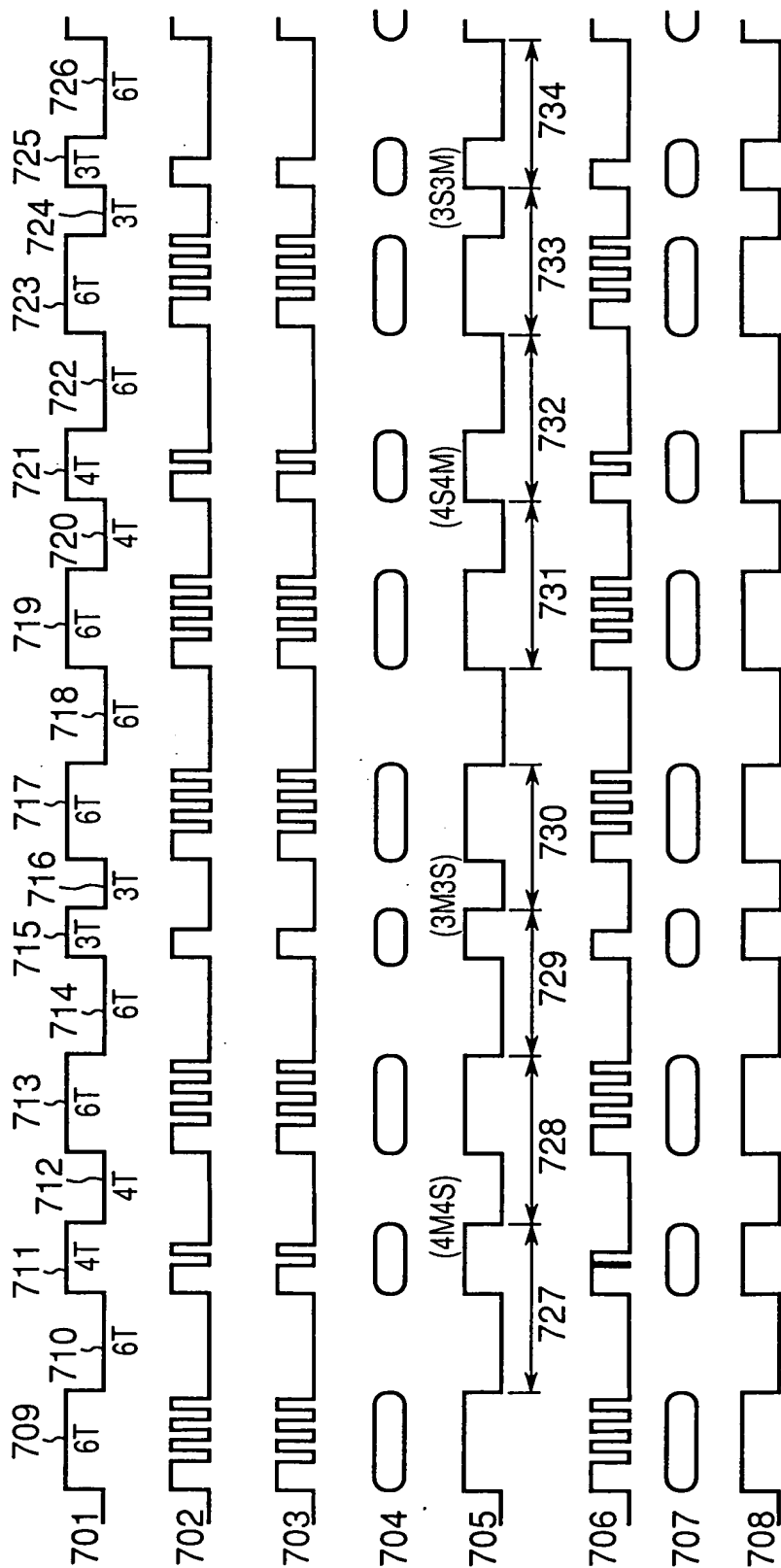


Fig. 8

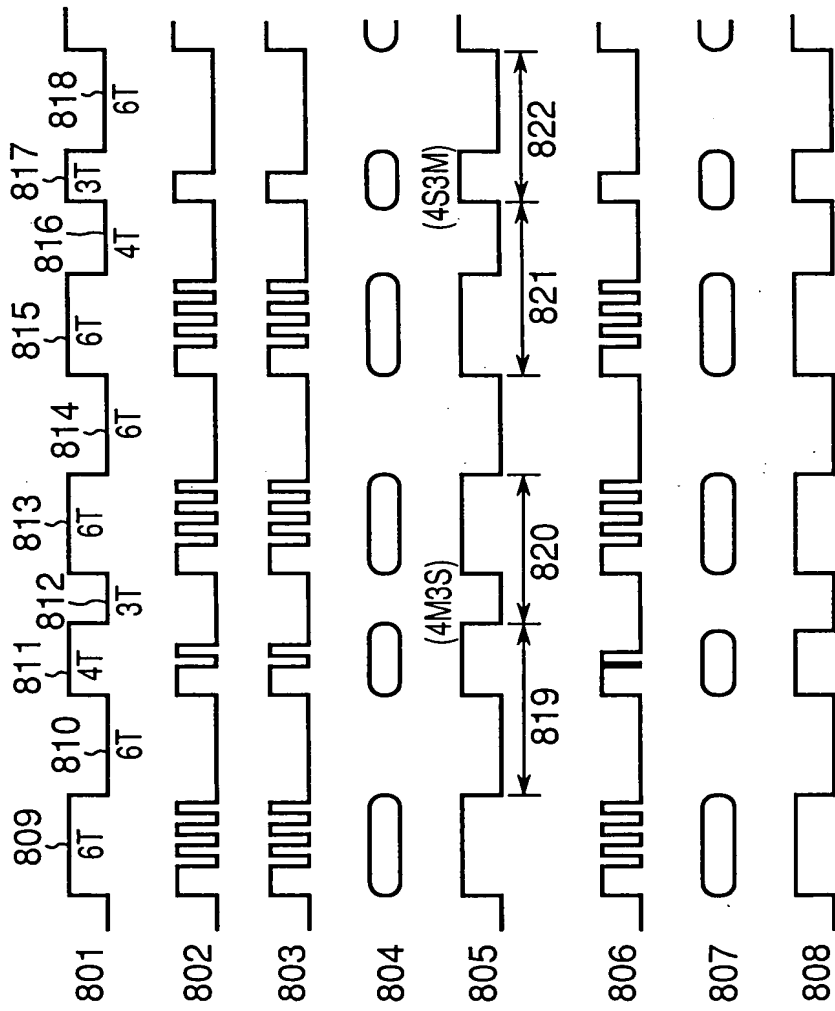
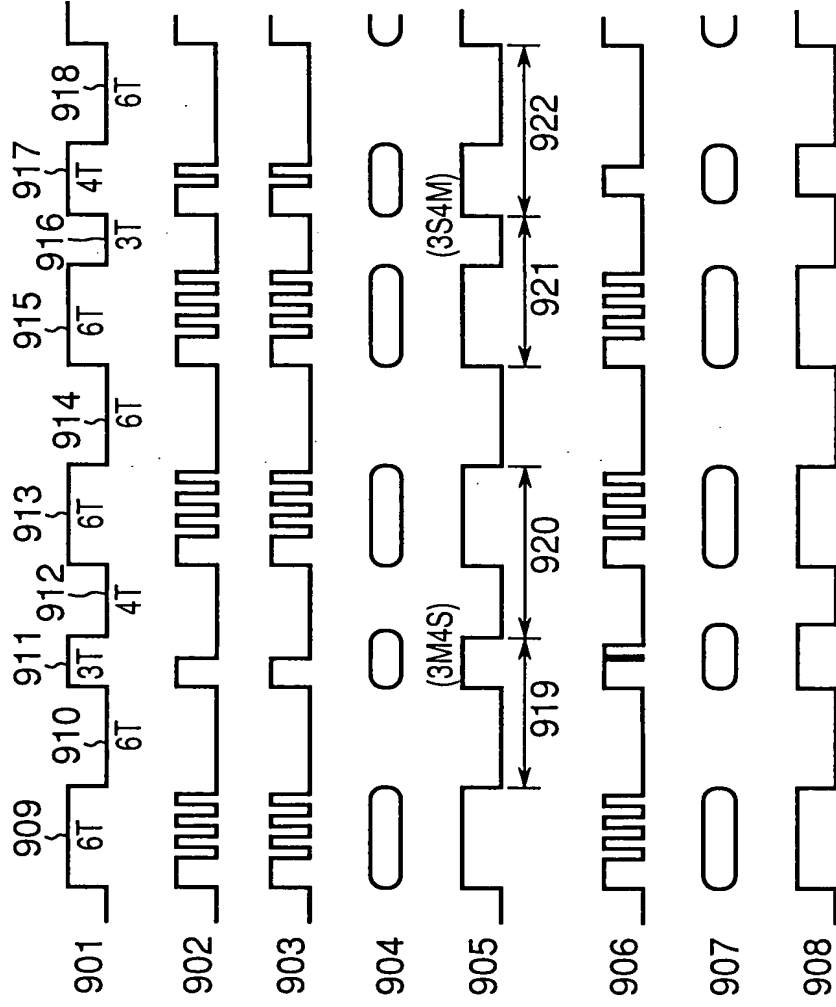
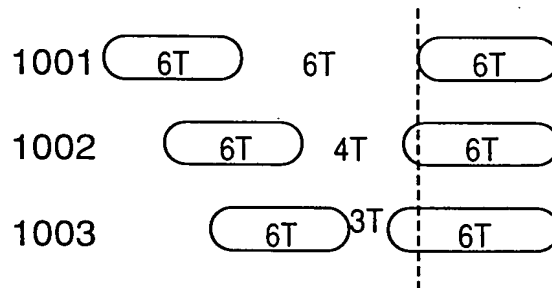




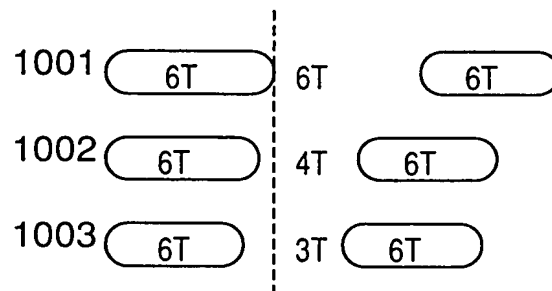
Fig.9



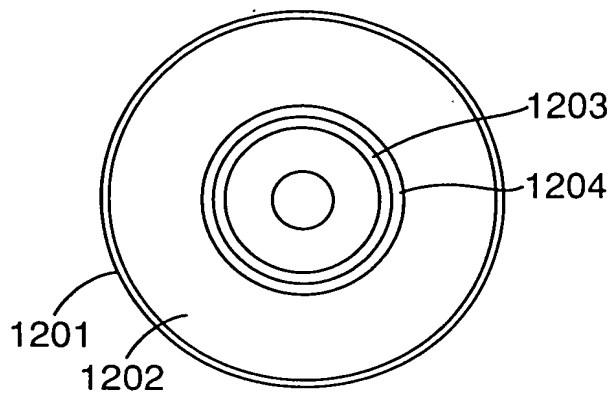
*Fig. 10*



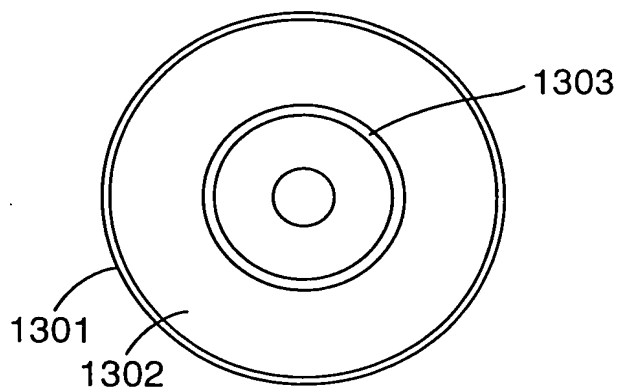
*Fig. 11*



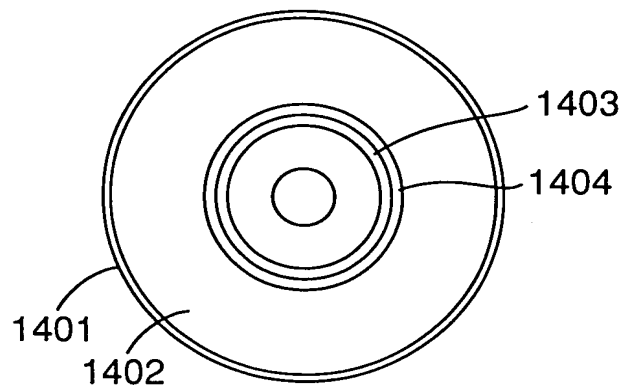
*Fig. 12*



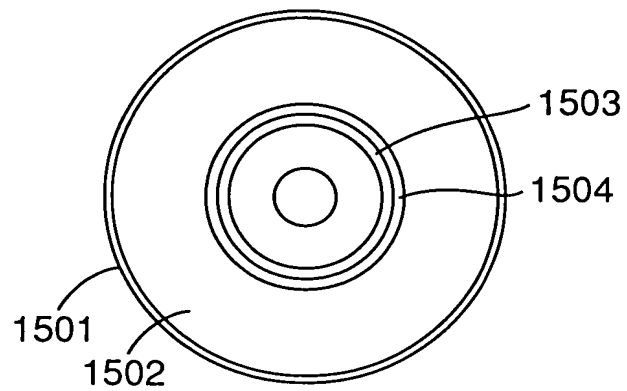
*Fig. 13*



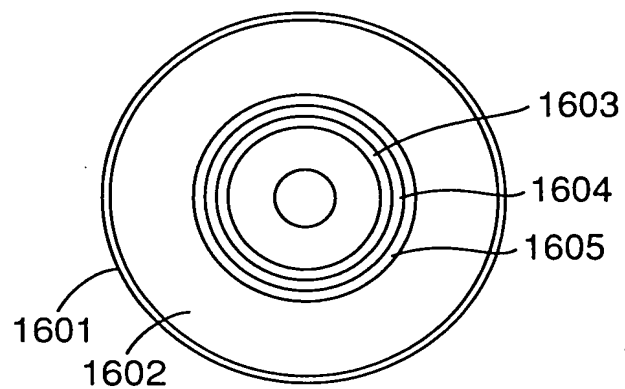
*Fig. 14*



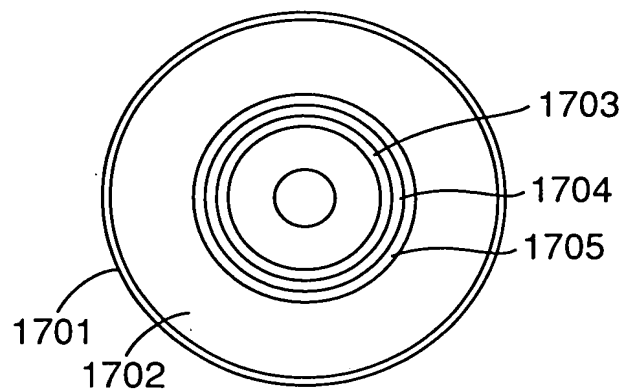
*Fig. 15*



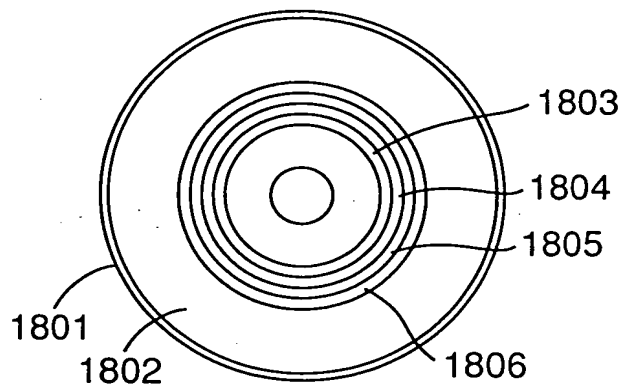
*Fig.16*



*Fig.17*



*Fig. 18*



Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

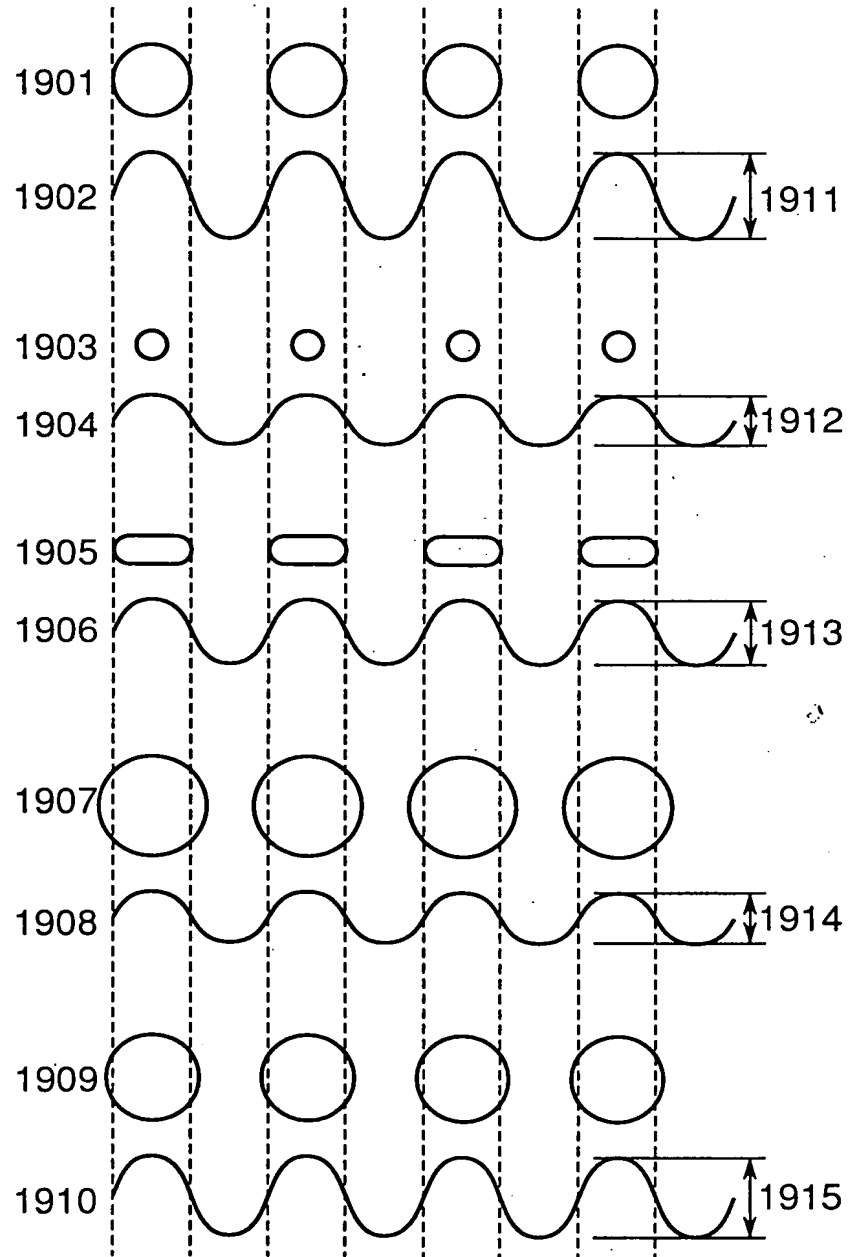


Fig.20A

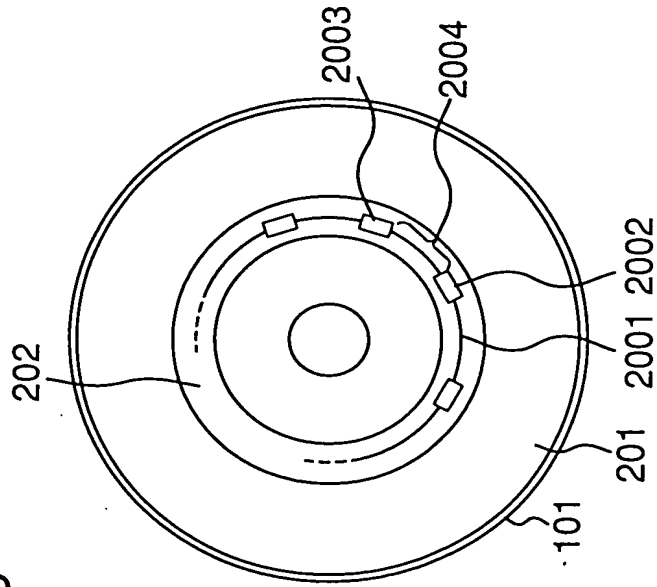


Fig.20B

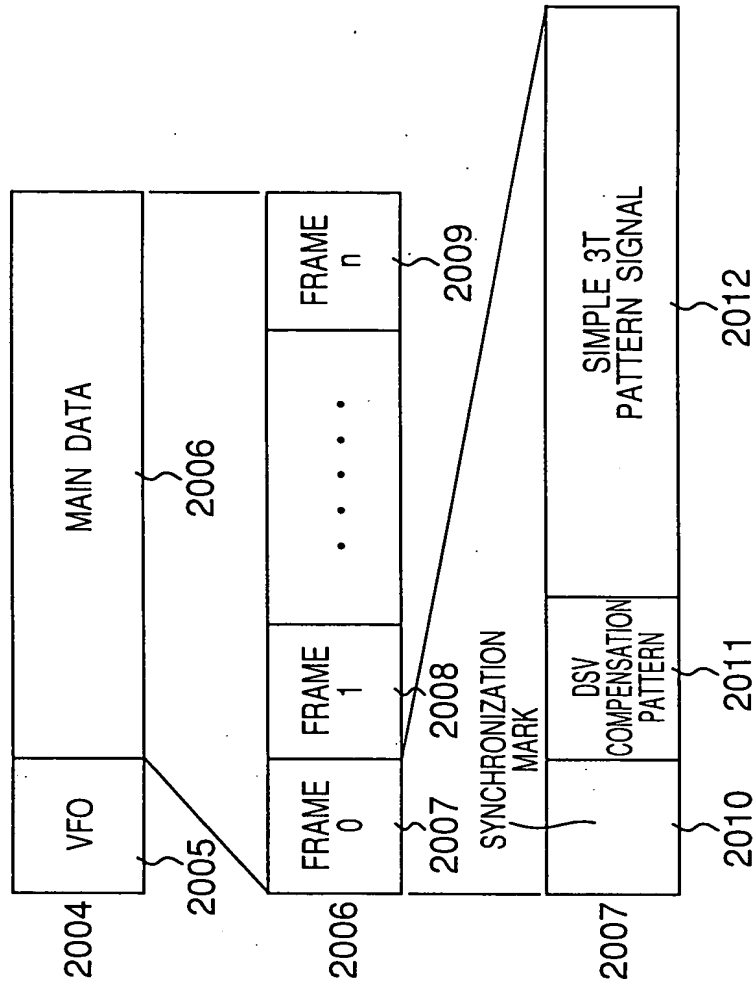


Fig.20C

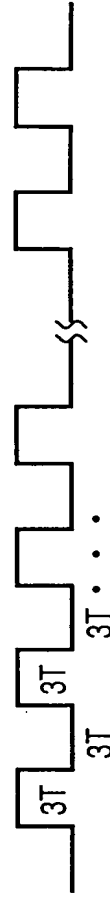




Fig.21

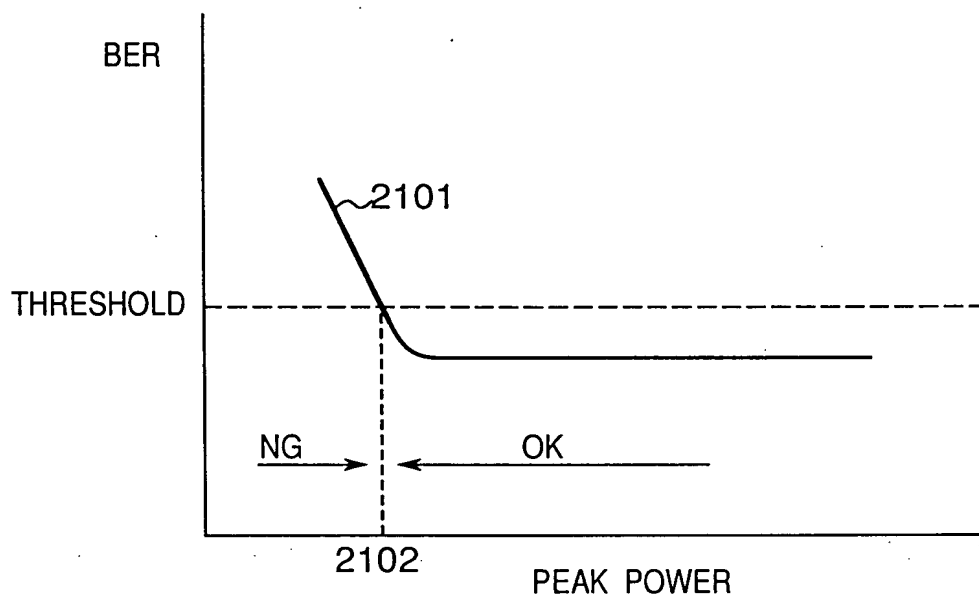


Fig.22

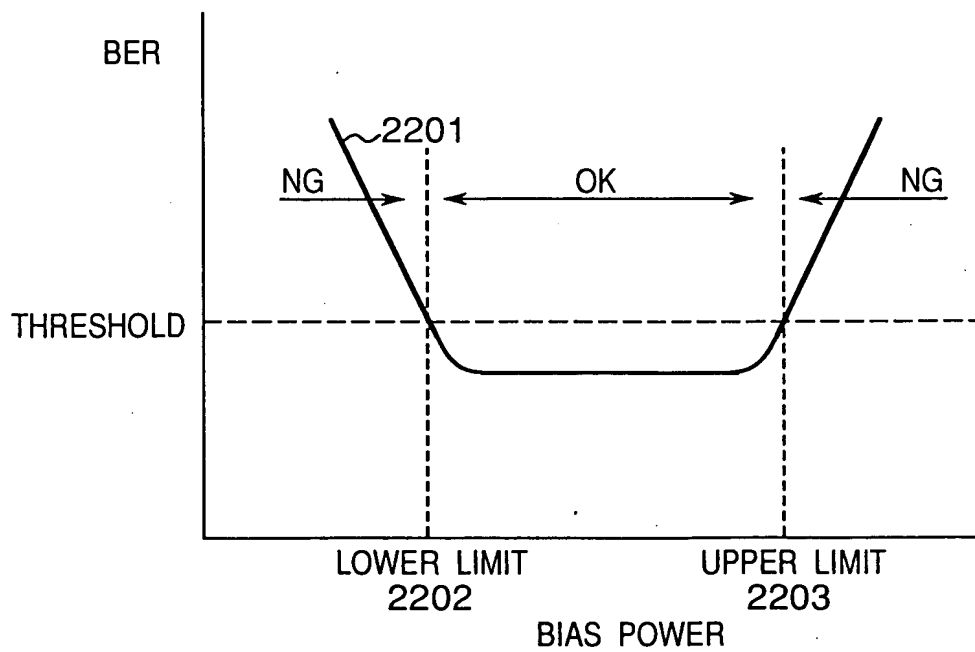


Fig.23

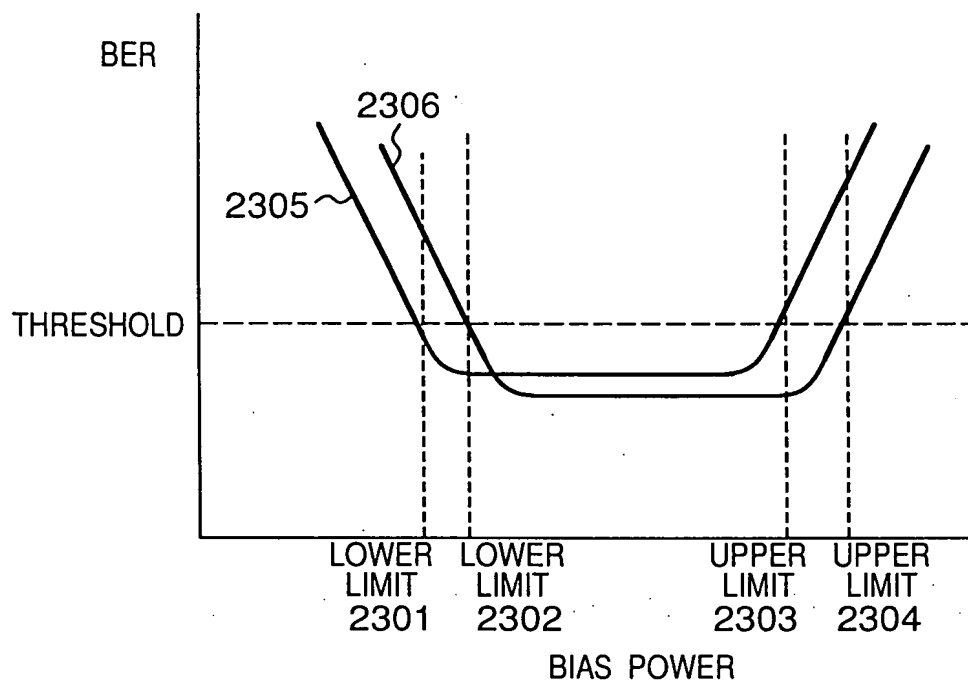


Fig.24

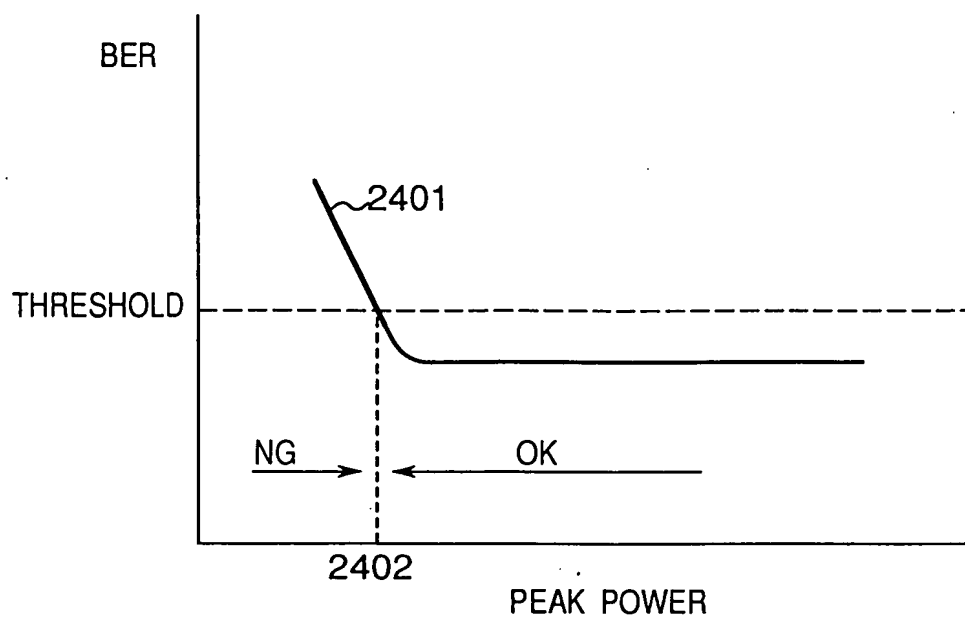


Fig.25

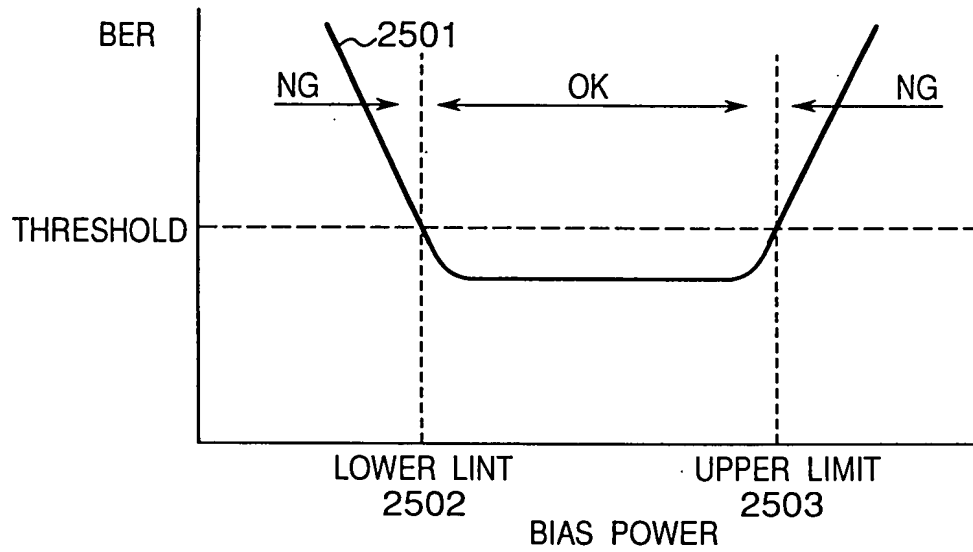


Fig.26

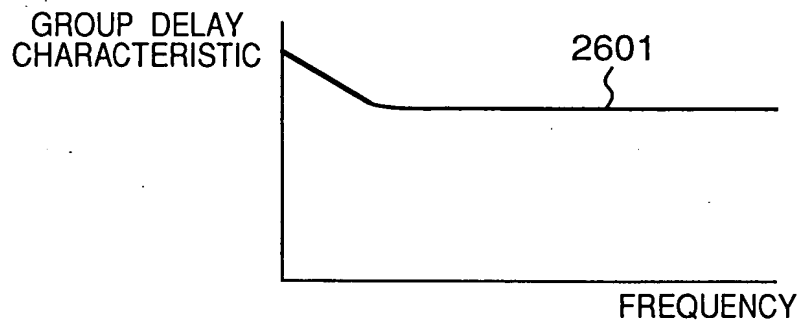


Fig.27

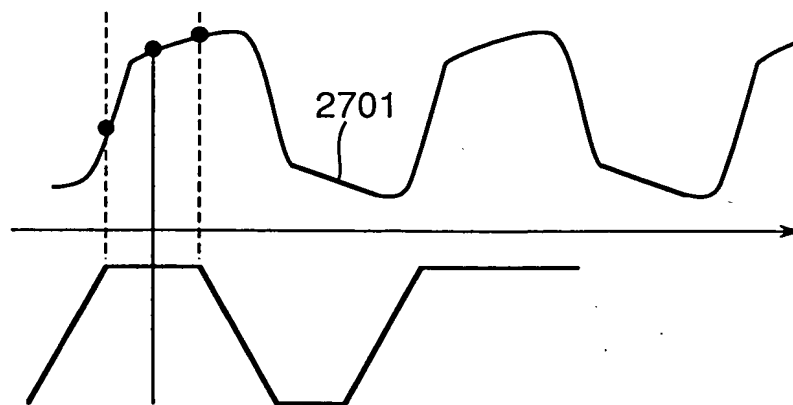


Fig.28A

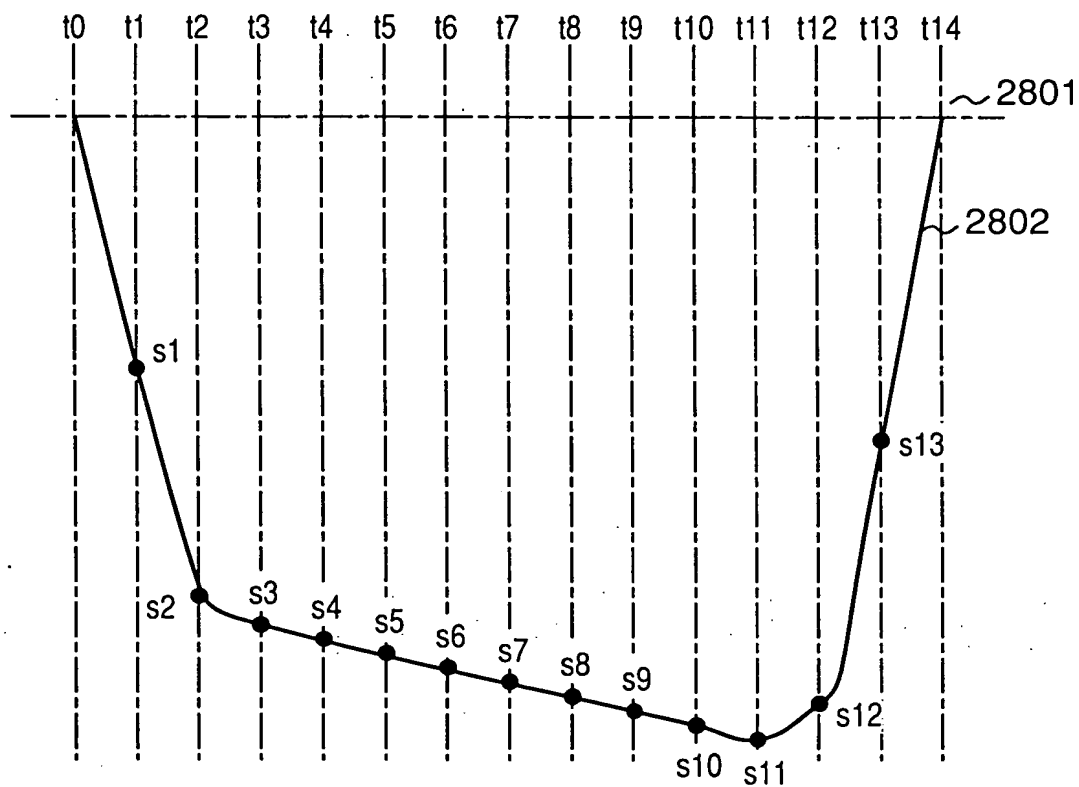


Fig.28B

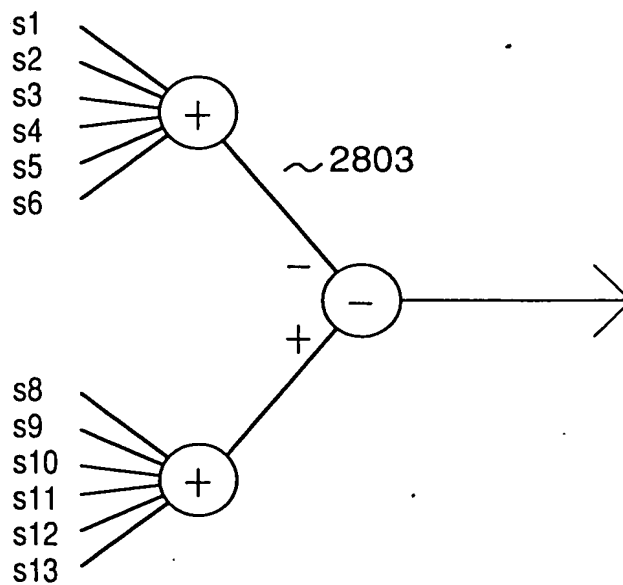


Fig.29A

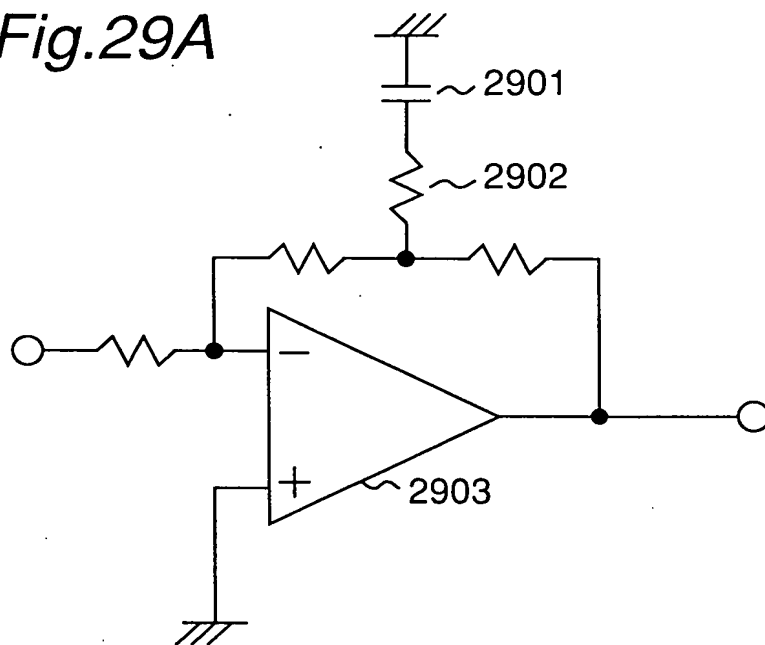


Fig.29B

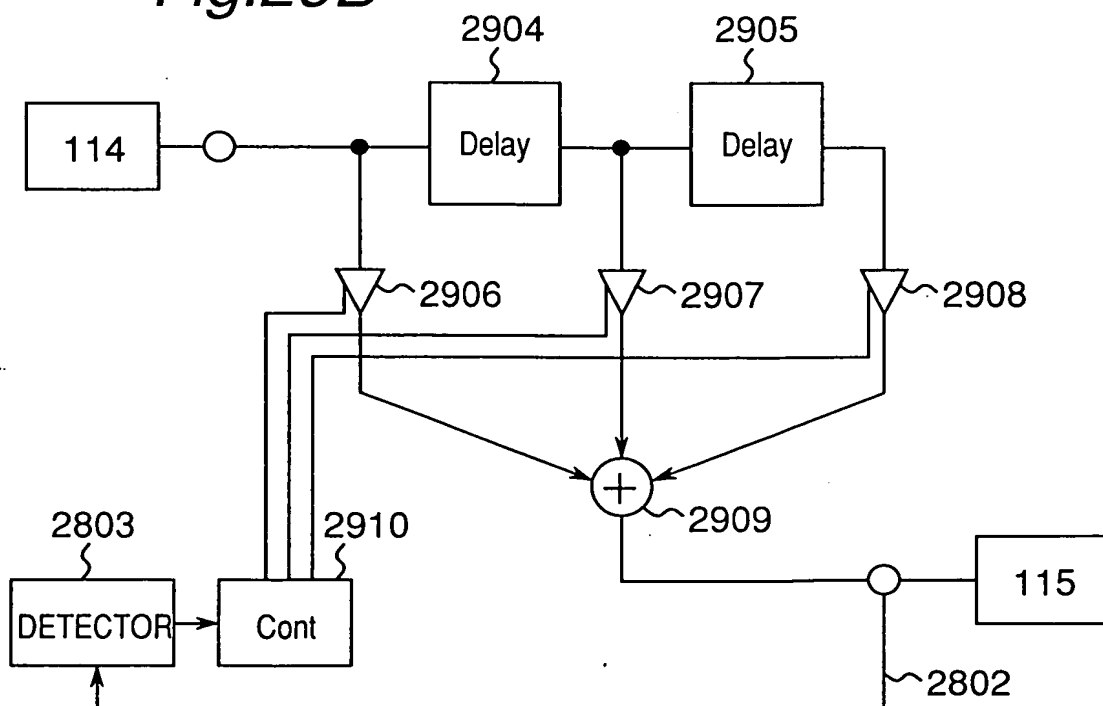


Fig.30

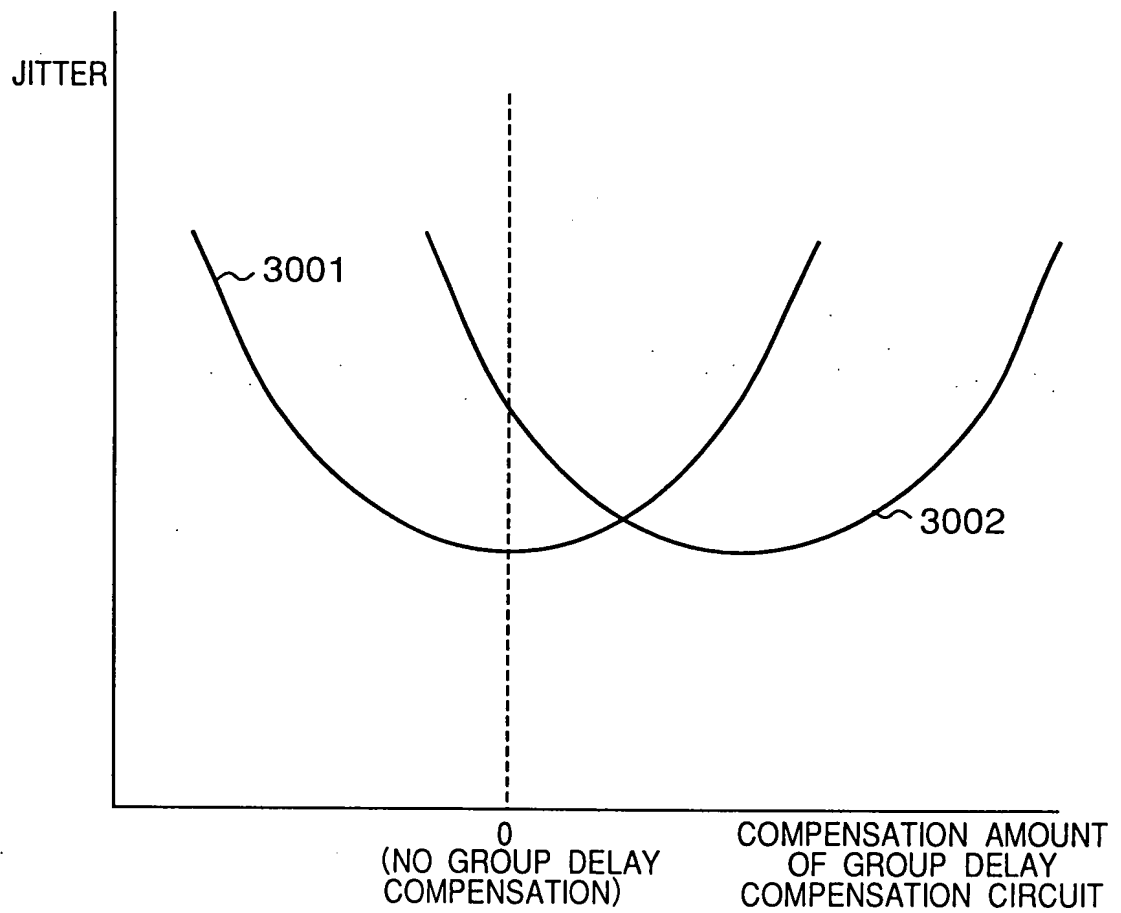


Fig.31A

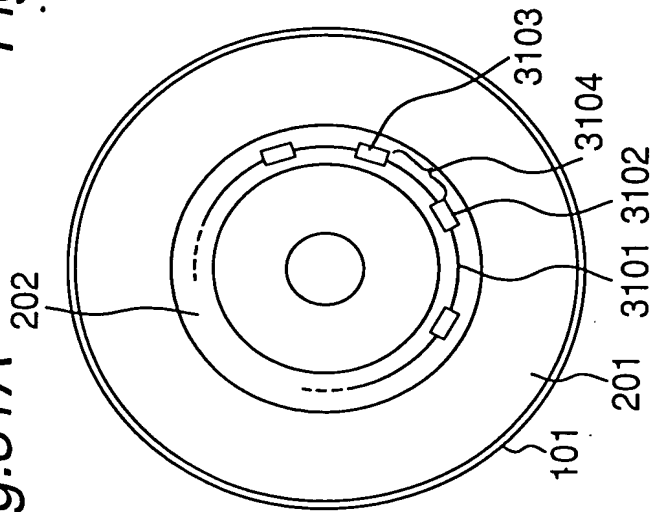


Fig.31B

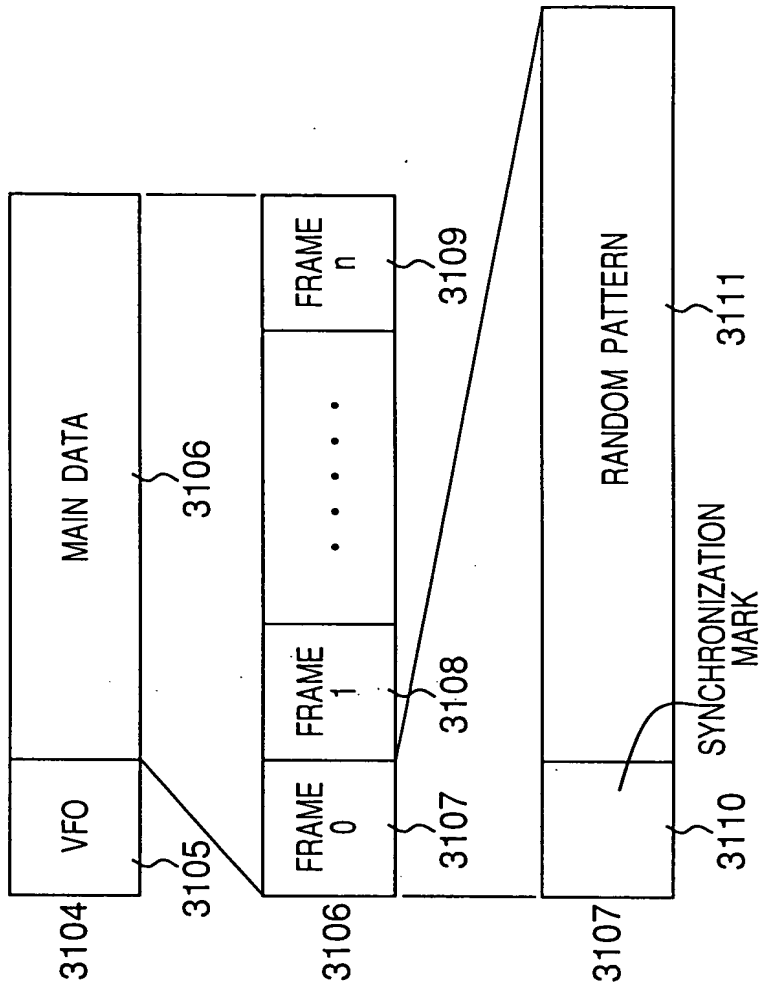


Fig.31C

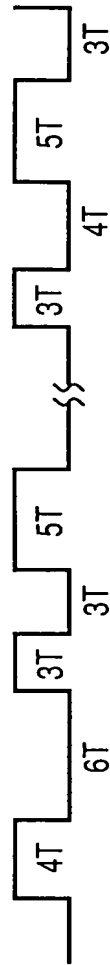


Fig.32

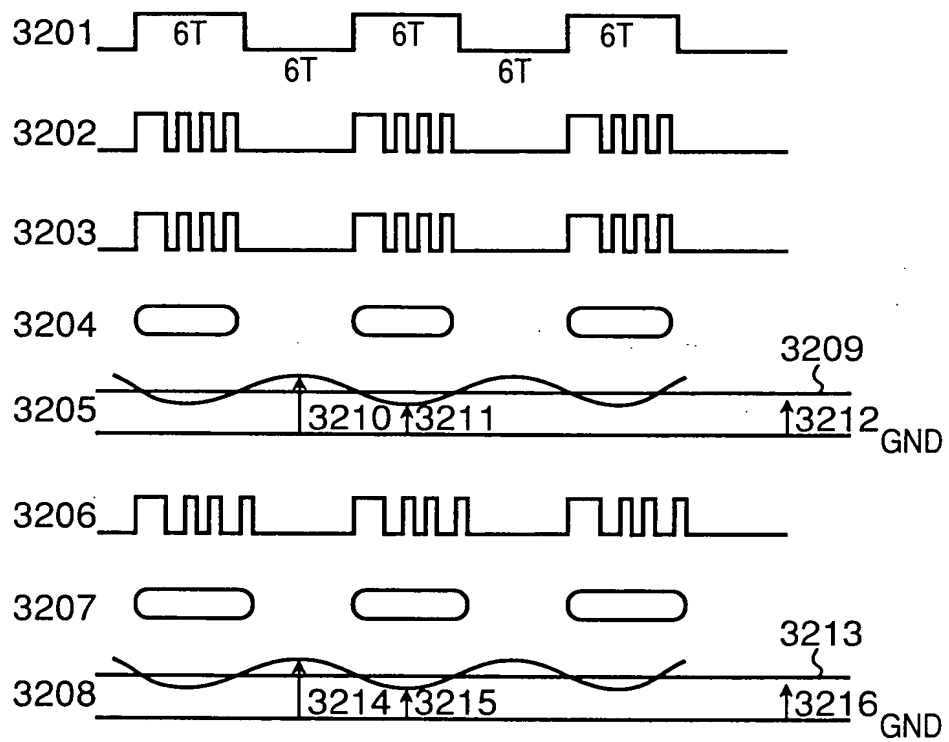
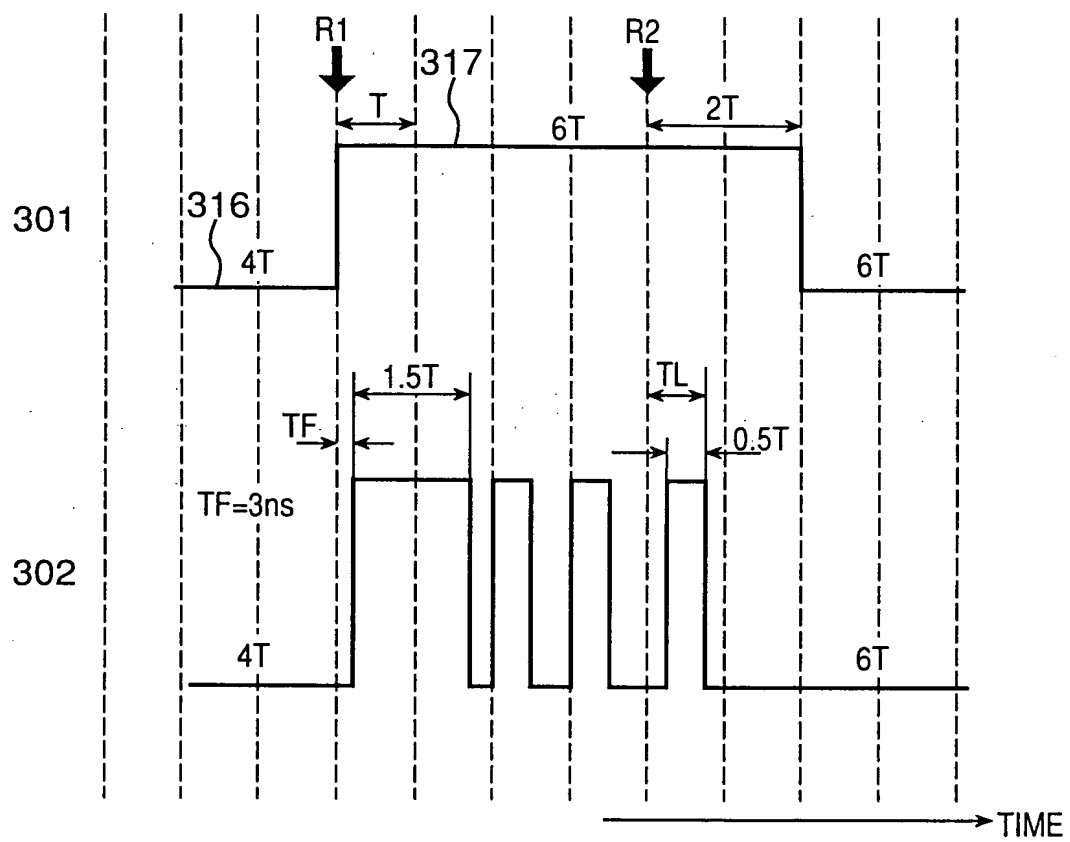




Fig.33



[illegible]

INSIDE CIRCUMFERENCE SIDE			
PIT AREA	INITIALIZATION ZONE		
	CONTROL DATA ZONE	DISC TYPE READ P PULSE ADJUSTMENT METHOD TEMPORARY P INFO (GEN) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (GEN) (PEAK P, BIAS P, MARGIN CONSTANT) ASYMMETRY (GEN) PULSE POSITION INFO (GEN) DISC SPECIFIC INFO	
		REPEAT THE ABOVE FOR FAIL SAFE	
		MIRROR AREA	
RECORDING AREA	CONNECTION ZONE		
	GUARD TRACK ZONE 1		
	DISC TEST ZONE 1		
	DRIVE TEST ZONE1		
	RECORDER-SPECIFIC INFO RECORDING ZONE 1	RECORDER-SPECIFIC INFO 1 TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO	
		RECORDER-SPECIFIC INFO 2 TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO	
		.	
		RECORDER-SPECIFIC INFO n TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO	
	REPEAT THE ABOVE FOR FAIL SAFE		
	DISC ERROR MANAGEMENT AREA 1		
DATA AREA			

Fig. 35

DATA AREA	
DISC ERROR MANAGEMENT AREA 2	
RECORDER-SPECIFIC INFO RECORDING ZONE 2	RECORDER-SPECIFIC INFO 1 TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO
	RECORDER-SPECIFIC INFO 2 TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO
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	RECORDER-SPECIFIC INFO 3 TEMPORARY P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (UNIQUE) (PEAK P, BIAS P, MARGIN CONSTANT) PULSE POSITION INFO (UNIQUE) (ASYMMETRY) P MARGIN INFO
	REPEAT THE ABOVE FOR FAIL SAFE
	DRIVE TEST ZONE 2
	DISC TEST ZONE 2
	GUARD TRACK ZONE 2
OUTSIDE CIRCUMFERENCE SIDE	

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Fig.36

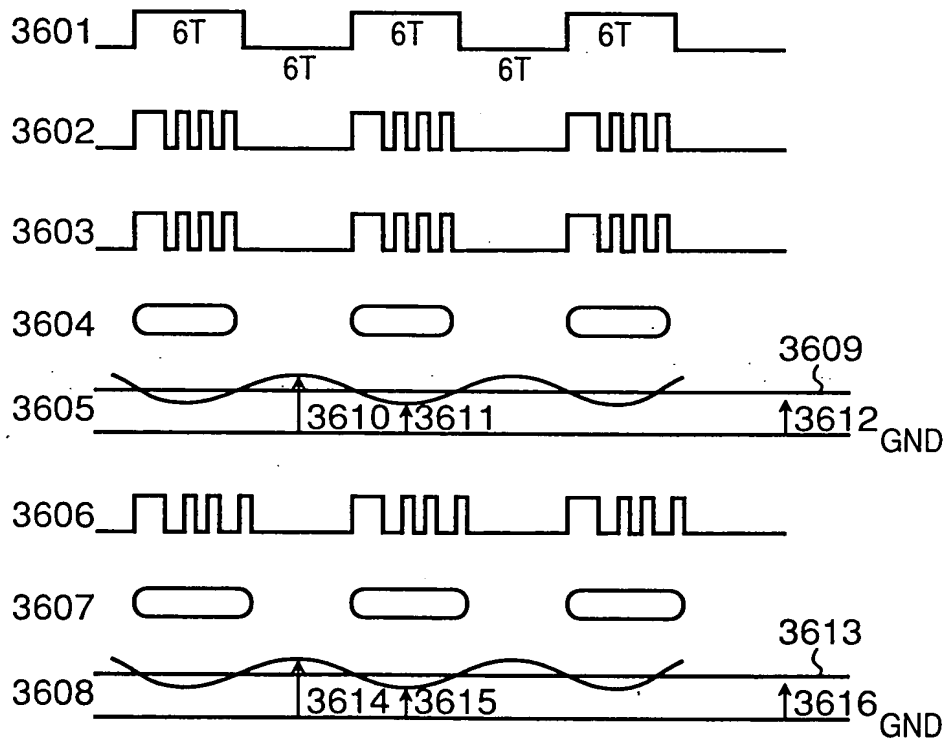


Fig. 37

130

DISC-SPECIFIC INFO 1 TEMPORARY P INFO (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (PEAK P, BIAS P, MARGIN CONSTANT) ASYMMETRY PULSE POSITION INFO
DISC-SPECIFIC INFO 2 TEMPORARY P INFO (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (PEAK P, BIAS P, MARGIN CONSTANT) ASYMMETRY PULSE POSITION INFO
.
DISC-SPECIFIC INFO n TEMPORARY P INFO (PEAK P, BIAS P, MARGIN CONSTANT, ASYMMETRY) OPERATIONAL P INFO (PEAK P, BIAS P, MARGIN CONSTANT) ASYMMETRY PULSE POSITION INFO POWER MARGIN INFO

REPEAT THE ABOVE FOR FAIL SAFE

Fig. 38

DATA	ADJUSTMENT			1ST/LAST			TEST	RESULT		MEMORY 130		ASYM
	SP	TEMP	OP	ASYM	SP	TEMP		1ST/	LAST	SP	LAST	
FIG. 2	201						202					
FIG. 12	1202	1203					1204					
FIG. 13	1302											
FIG. 14	1402	1403										
FIG. 15	1502						1504					
FIG. 16	1602	1603					1605					
FIG. 17	1702						1704					
FIG. 18	1802	1803					1805					
CONTROL DATA ZONE												
							TEST	DISC-SPECIFIC				
							ZONE	INFO RECORDING ZONE				

DATA..... DATA AREA

ADJUSTMENT AREA FOR RECORDING ADJUSTMENT METHOD WITH EMBOSSED PITS

1ST/LAST..... AREA FOR RECORDING INFO OF MARK START/END POSITIONS WITH EMBOSSED PITS

TEST..... AREA FOR TEST WRITING FOR OBTAINING INFO OF MARK START/END POSITIONS, OPTIMUM POWER, ETC.

RESULT..... AREA FOR RECORDING THE TEST RESULTS

SP..... INFO SPECIFIC TO THE DISC

TEMP..... INFO OF TEMPORARY POWER LEVEL INCLUDING PEAK POWER, BIAS POWER, MARGIN CONSTANT, AND ASYMMETRY FOR USE IN ADJUSTING 1ST AND LAST PULSE POSITIONS

OP..... INFO OF OPERATIONAL POWER LEVEL INCLUDING PEAK POWER, BIAS POWER AND MARGIN CONSTANT FOR USE IN RECORDING DATA IN DATA AREA

ASYM..... INFO OF ASYMMETRY FOR USE IN DETERMINING THE INITIAL POSITION OF 1ST AND LAST PULSES

Δ..... OPTION